## THE ROLE OF THE HEALTH — SYSTEMS AGENCY IN THE CONTROL OF HYPERTENSION\*

JESSE B. ARONSON, M.D.

Director, New York Metropolitan Regional Medical Program
New York, N.Y.

T HE control of hypertension in a community requires more than widely advertised, well-intentioned slogans. It requires a strategy to involve and coordinate the participation of a variety of researchers, providers of medical care, educators, businessmen, labor leaders, allied health professionals, and other community resources, including patients identified as being hypertensive and the population at large.

It is the role of the health-systems agency to devise such a strategy and provide the stimulus for its implementation. The plan must include the following activities:

- 1) A detailed consideration of the nature of hypertension as a disease process and especially those aspects which are susceptible to change, either through the influence of community services or individual action
- 2) A determination of the prevalence of the disease in various segments of the population
- 3) An assessment of the available resources in terms of appropriateness, adequacy, accessibility, and acceptability
- 4) A calculation of the total resources which are necessary for optimum effectiveness of the control effort
  - 5) A statement of the unmet needs in the order of priority
- 6) A constellation of activities designed to mobilize each potential participant to carry out a specific role in coordination with the other participants
- 7) A procedure of monitoring to provide a basis for adjusting activities to meet unforeseen situations and to assess the human benefits as well as the effectiveness of programs which are in operation

To provide a comprehensive perspective of the scope of the problem

<sup>\*</sup>Presented as part of a Conference on Developing and Managing Community Programs for the Control of Hypertension held by the New York Metropolitan Regional Medical Program at the New York Academy of Medicine April 15, 1975.

confronting us, I shall analyze it in accordance with the health-field concept developed by the Canadian Ministry of National Health and Welfare. This concept is based on the assumption that there are four broad elements in the assessment of any health problem, viz., human biology, environment, life style, and health-care organization. By means of this model we can identify each factor and assess it in terms of its potential in the control of a disease.

Scientific knowledge about the biological origins of hypertension is rather limited. Thus, extensive research on the genetic factors, the factors of maturation and aging, and the physiological process of the bodily systems must be completed before the causes of this disease can be defined and effective biological controls can be devised. The cases of hypertension resulting from kidney disease and certain glandular disorders are exceptions; these often can be cured by timely intervention.

Environmental elements external to the body are not subject to control by the individual. Such factors coexist with hypertension and have been the subject of hypothetical assumptions. Few conclusions have been validated. The urban environment and the salinity of water may be related to the incidence of hypertension. It is more certain that these factors are involved in the progression of the disease and are barriers to its therapeutic control. There is some evidence that unsettling or rapid changes in the social, family, and occupational environment may be related to the incidence and progress of hypertension.

The category of "life style" includes health-influencing conditions which are subject to individual initiative and control. Dietary excess, insufficient rest and recreation, and occupational, family, and social stress are thought by many to have a role in creating risks for the onset and progress of hypertension. The most serious factor of life style affecting the control of this disease is the failure of a significant proportion of patients to comply with the regimens recommended by their doctors and their failure to remain under medical supervision for long periods.

Of course, a variety of components of health-care organization are necessary to provide a comprehensive program of finding cases, diagnosis, therapy, and rehabilitation to ensure optimum care during the phases of the disease and its sequelae. Of greatest importance is the study of standards of medical care as they relate to outcome.

The health-field concept provides a framework for the analysis of hypertension and puts into perspective the scope of activities and agencies—regulatory, research, educational, service, governmental, voluntary, and private—which can be brought to bear on the various disease-controlling factors identified as being involved in each of the elements of the health field. Selecting a technique of intervention for each of these factors requires a sophisticated assessment of its feasibility and its cost in relation to its effectiveness. Such a systems approach serves to identify exactly the needed areas of research, regulation, education, and promotion as well as activities required for the finding, diagnosing, and treating of cases.

We then must devise a strategy to involve appropriate agencies and to integrate selected activities into a unified program. It is obvious that the control of hypertension is only one of an entire range of health problems confronting the local health-systems agency. The health-systems agency, with guidance and assistance from the state and national health-planning units, must fit its strategy for the control of hypertension into an over-all logistical pattern that provides for cost-effective allocation of the health resources—facilities, manpower, and money—within its area of jurisdiction.

It is also well to remember that hypertension and arteriosclerosis are closely related and that their control is intimately related.

This outline of the process of planning for control of hypertension was presented as an illustration of the planning activities mandated in PL 93-641, The National Health Planning and Resources Development Act of 1974. Under this law such plans must be used as the basis for decisions on the issuance of certificates of need for the creation of new or additional health facilities or services, for the periodic review of the adequacy and need of existing services, for the approval or rejection of applications for federal funding of local health activities, and for the allocation of area funds for the development of health services.

The impending enactment of national health-insurance legislation and the consideration being given to a ceiling on the percentage of the gross national product that will be allocated to health services give the development of this rather complicated planning new urgency.

The great accomplishments of health and medical care systems in the United States have been brought about by independent agencies within the framework of voluntarism and the freedom to innovate. The greatest disservice to health care in this country, I believe, would be the centralized administration of health services.

The National Health Planning and Resources Development Act of 1974 mandates us to set in motion a pattern of relations which may provide the opportunity to avoid a government-operated health system and to preserve the values of voluntarism. We may be able to devise a system for adjusting the voluntary health services in the United States to the new demands of technical development, to the rising health-care expectations of the population at large, and to the new role of consumers in its planning and operation. This is the promise of the health-systems agency.

As many of you know, in endorsing the basic provisions of the new law and in urging its enactment, the New York Metropolitan Regional Medical Program assumed a position of national leadership among the 53 regional medical programs. Our position was based upon the concept that planning and implementation are by definition part of a single process, and that sanctions are required to make the process effective. The regulatory powers contained in the certificate of need and the Section 1122 provisions of the law, together with funds to support projects to implement priority items in the local health plan, can provide the necessary level of sanctions without subverting the freedom that is basic to voluntarism.

Our Technical Consulting Panel on Hypertension now has under development a region-wide plan for the control of hypertension. This conference should provide a sound basis for formulating a plan which will be a true consensus of all those who are concerned with the control of hypertension.